UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,264	09/10/2001	Kemal Guler	HP-10014767	8692

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EXAMINER
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ART UNIT	PAPER NUMBER
3691	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/955,264	GULER ET AL.
	Examiner	Art Unit	
	BIJENDRA K. SHRESTHA	3691	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>01 February 2008</u>.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-6,8-13 and 15-20</u> is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) <u>1-6, 8-13 and 15-20</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a) ☐ All b) ☐ Some * c) ☐ None of:
　　　　1. ☐ Certified copies of the priority documents have been received.
　　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.
　　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-21 are presented for examination. Applicant filed an amendment on

02/01/2008 amending claims 1, 8, 15 and 20, and canceling claims 7, 14 and 21. After

careful consideration of applicant's arguments and amendments, new grounds of

rejections of claims necessitated by Applicant's amendment are established in the

instant application as set forth in detail below. Applicant's arguments with respect to

claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-6, 8-13 and 15-20 rejected under 35 U.S.C. 103(a) as being

unpatentable over Rackson et al., U.S. Patent No. 6,415,270 (reference A in attached

PTO-892) in view of Bishop et al., U.S. Patent No. 6,556,960 (reference B in attached

PTO-892) further in view of Castillo et al. (reference U in attached PTO-892).

3.   As per claim 1, Rackson et al. teach a method for determining an optimal bid for

an item in a market, said method comprising:

        a) selecting characteristics of said market (see Fig. 13 (step 600); column 9, lines

25-35);

b) selecting a bidding model (see column 11, lines 2-5, 24-26; column 22, lines 26-29);

c) estimating a structure of said market (see Fig. 13, steps 610; column 19, lines 4-21);

d) determining a bid function (see Fig. 13, step 612; column 8, lines 11-17); and

e) determining said optimal bid wherein said optimal bid is calculated based upon a received evaluation criteria and said bid function (see Figs. 2, 10 and (13, steps 650 and 654); column 8, lines 49-63; column 25, lines 39-41).

Rackson et al. do not teach unobservable variables are expressed in terms of observable bids by inverting said bidding model.

Bishop et al. teach unobservable variables are expressed in terms of observable bids by inverting said bidding model (Bishop et al., column 5, lines 34-60; where observable variables are expressed in terms of unobservable variables in a equation in a form of X=KY, where X is a observable variable, K is a proportional constant and Y is an unobservable variable so that Y=X/K , indicating unobservable variable Y is expressed in terms of observable variable X by inverting proportional constant K).

Therefore, it would have been obvious to one of ordinary skill in the art the time the Applicant's invention was made to modify the teachings of Rackson et al. to include the teachings of Bishop et al. The motivation to combine these references is to facilitate representation of unobservable variables in terms of observable variable using model that use external information that contributes to the knowledge about states of unobservable components (Castillo et al., Fig. 1, page 137, column 2, paragraphs 3-5).

4.   As per claim 2, Rackson et al. in view of Bishop et al. further in view of Castillo et

al. teach claim 1 as described above. Rackson further teaches the method wherein said

step a) comprises:

   receiving a first user input, wherein said first user input comprises information

identifying an item to be bid on (see Fig. 11 and 12; column 24, lines 5-24; column 23,

lines 39-41);

       accessing a database (see Figs. 10, 11 and 12; column 23, lines 30-55);

       retrieving historical bids data from said database; retrieving auction

characteristics data from said database, wherein said auction characteristics data

comprise information relating to historical auctions of items similar to said item to be bid

on; outputting said historical bids data; and outputting said auction characteristics data

(see Fig. 13; steps 600, 610 and 612; column 24, lines 57-62).

5.   As per claim 3, Rackson et al. in view of Bishop et al. further in view of Castillo et

al. teach claim 1 as described above. Rackson et al. further teach the method wherein

said step b) comprises:

       receiving auction characteristics data; accessing a database; retrieving from said

database said bidding model, wherein said bidding model is selected based on a

corresponding relevance of said auction characteristics data; and outputting said

bidding model (see column 22, lines 26-29; 49-55)).

6.   As per claim 4, Rackson et al. in view of Bishop et al. further in view of Castillo et

al. teach claim 1 as described above. Rackson et al. further teach the method wherein

said step c) comprises:

receiving said bidding model; receiving historical bids data (see column 18, lines 49-52);

transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model; estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and outputting said structure (see column 18, lines 53-63).

7.   As per claim 5, Rackson et al. in view of Bishop et al. further in view of Castillo et al. teach claim 1 as described above. Rackson et al. further teach the method wherein said step d) comprises:

receiving a second user input; receiving a structure; generating a bid function, wherein said bid function is based on said structure and said second user input; and outputting said bid function (see Fig. 12; column 24, lines 5-56).

8.   As per claim 6, Rackson et al. in view of Bishop et al. further in view of Castillo et al. teach claim 5 as described above. Rackson et al. further teach the method, wherein said second user input comprises:

an auction format; a valuation of said item; and an expected number of rival bidders (see Figs. 5, 6, 7, 8 and 14).

9.   As per claim 8, Rackson et al. teach a computer system comprising:

a bus (see Fig. 10; connects memory (32) and processor (36));

a memory interconnected with said bus (see Fig. 10; memory (32)); and

a processor interconnected with said bus (see Fig. 10, memory (32)),

wherein said processor executes a method for determining an optimal bid for an

item in a market, said method comprising:

a) selecting characteristics of said market (see Fig. 13 (step 600); column 9, lines

25-35);

b) selecting a bidding model(see column 11, lines 2-5, 24-26; column 22, lines

26-29);

c) estimating a structure of said market (see Fig. 13, steps 610; column 19, lines

4-21);

d) determining a bid function (see Fig. 13, step 612; column 8, lines 11-17); and

e) determining said optimal bid wherein said optimal bid is calculated based upon

a received evaluation criteria and said bid function_ (see Figs. 2, 10 and (13, steps 650

and 654); column 8, lines 49-63; column 25, lines 39-41).

Rackson et al. do not teach unobservable variables are expressed in terms of

observable bids by inverting said bidding model

Bishop et al. teach unobservable variables are expressed in terms of observable

bids by inverting said bidding model (Bishop et al., column 5, lines 34-60; where

observable variables are expressed in terms of unobservable variables in a equation in

a form of X=KY, where X is a observable variable, K is a proportional constant and Y is

an unobservable variable so that Y=X/K , indicating unobservable variable Y is

expressed in terms of observable variable X by inverting proportional constant K).

Therefore, it would have been obvious to one of ordinary skill in the art the time the

Applicant's invention was made to modify the teachings of Rackson et al. to include the

teachings of Bishop et al. The motivation to combine these references is to facilitate

representation of unobservable variables by in terms of observable variable using model

that use external information that contributes to the knowledge about states of

unobservable components (Castillo et al., Fig. 1, page 137, column 2, paragraphs 3-5).

10.   As per claim 9, it is rejected with same rational as claim 2.

11.   As per claim 10, it is rejected with same rational as claim 3.

12.   As per claim 11, it is rejected with same rational as claim 4.

13.   As per claim 12, it is rejected with same rational as claim 5.

14.   As per claim 13, it is rejected with same rational as claim 6.

15.   As per claim 15, Rackson et al. teach a computer readable medium for causing a

computer system to execute the steps in a method for determining an optimal bid for an

item in a market (see Figs. 3, 10 and 11),

        said method comprising:

        a) selecting characteristics of said market (see Fig. 13 (step 600); column 9, lines

25-35);

        b) selecting a bidding model(see column 11, lines 2-5, 24-26; column 22, lines

26-29);

        c) estimating a structure of said market(see Fig. 13, steps 610; column 19, lines

4-21);

d) determining a bid function (see Fig. 13, step 612; column 8, lines 11-17); and

e) determining said optimal bid wherein said optimal bid is calculated based upon an evaluation criteria and said bid function (see Figs. 2, 10 and (13, steps 650 and 654); column 8, lines 49-63; column 25, lines 39-41).

Rackson et al. <u>do not teach unobservable variables are expressed in terms of observable bids by inverting said bidding model</u>

Bishop et al. teach unobservable variables are expressed in terms of observable bids by inverting said bidding model (Bishop et al., column 5, lines 34-60; where observable variables are expressed in terms of unobservable variables in a equation in a form of X=KY, where X is a observable variable, K is a proportional constant and Y is an unobservable variable so that Y=X/K , indicating unobservable variable Y is expressed in terms of observable variable X by inverting proportional constant K).

Therefore, it would have been obvious to one of ordinary skill in the art the time the Applicant's invention was made to modify the teachings of Rackson et al. to include the teachings of Bishop et al. The motivation to combine these references is to facilitate representation of unobservable variables by in terms of observable variable using model that use external information that contributes to the knowledge about states of unobservable components (Castillo et al., Fig. 1, page 137, column 2, paragraphs 3-5).

16.   As per claim 16, it is rejected with same rational as claim 2.

17.   As per claim 17, it is rejected with same rational as claim 3.

18.   As per claim 18, it is rejected with same rational as claim 4.

19.   As per claim 19, it is rejected with same rational as claim 5.

20.   As per claim 20, it is rejected with same rational as claim 6.

Response to Arguments

21.   Applicant's arguments with respect to claims have been considered but are moot
in view of the new ground(s) of rejection. Accordingly, this action is made **Non-Final.**

Conclusion

22.   The prior art made of record and not relied upon is considered pertinent to
applicant's disclosures. Applicant is required under 37 CFR 1.111(c) to consider
references fully when responding to this action.

The following are pertinent to current invention, though not relied upon:

Ausubel (U.S. Patent No. 6,021,398) teaches computer implemented method
and apparatus for auctions.

Feinberg (U.S. Patent No. 6,366,891) teaches data processing system for
conducting a modified on-line auction.

Gujral et al. (U.S. Pub No. 2002/0042769) teach system and method for
conducting electronic auction with multi-parameter optimal bidding.

Harrington et al. (U.S. Patent No. 6,161,099) teach process and apparatus for
conducting auction over electronic networks.

Hambrecht et al. (U.S. Patent No. 6,629,082) teach auction system and method
for pricing and allocation during capital formation.

Luke et al. (U.S. Patent No. 6,131,087) teach method for automatically identifying, matching, and near-matching buyers and sellers in electronic market transactions.

Lupien et al. (U.S. Patent No. 5,101,353) teach automated system for providing liquidity to securities markets.

Messmer et al. (U.S. Patent No. 7,096,197) teach methods and apparatus for simulating competitive bidding yield.

Seymor et al. (U.S. Patent No. 6,871,190) teach system and method for conducting an electronic auction over an open communications network.

Shoham (U.S. Patent No. 6,285,989) teaches universal on-line trading market design and deployment system.

Zellner, Arnold (International Economic Review, October, 1970) teaches estimation of regression relationships containing unobservable independent variables.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijendra K. Shrestha whose telephone number is (571)270-1374. The examiner can normally be reached on 7:00AM-4:30PM (Monday-Friday); 2nd Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571)272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Hani M. Kazimi/
Primary Examiner, Art Unit 3691